4380

Letters

Continued from page 3

reports (a few of which have good scientific merit) which have appeared in *Mother Earth News* over the past seven to eight years, plus many related reports appearing in government and trade journals of *Science* of projects conducted by CSIRO in Australia, our government in the U.S. Southwest, in Greenland, the Near East, India, etc.

The major objections raised by the status quo and vested interest groups are: (1) it is impractical to spread heavy mulch over large areas, and (2) granting that it is possible, it would take re-education of the farmer, the farm equipment suppliers, and the fertilizer industry. However, those knowledgeable in the art of heavy mulching will tell you that farmers *can* mulch large areas for about one tenth their present investment in machinery and fertilizer, and crop yields in most cases will double within two to three years. Also, suitable mulching materials are abundantly available to even the largest enterprise, but the sources are so varied and numerous for each area or even individual farm that it must be surveyed on a case-by-case basis.

Other than the unfortunate comment on CO_2, Zelitch's article was an interesting review of a fascinating subject. I, personally, would like to see much more of this type of knowledge brought closer to the farmer along with an education on the practical application of it. If we allow the purveyors of equipment and chemicals the continuing sole right to disseminate only that information which they feel is in their best interests, we will face continuing poorer-quality food at ever-higher prices.

Raymond A. Pohl

SOLAIR Systems, Slidell, La.

SIR: I compliment Israel Zelitch on his fine article on "Photosynthesis and Plant Productivity." Though his review is excellent, I find his approach to broader, long-term objectives, evidenced by the first three paragraphs of the article, regrettably monolithic and tunnel-visioned. Unfortunately, the dogma that the single panacea for solving the world's anticipated food needs in the next quarter century and beyond is "*increase production,*" is by no means limited to Zelitch. But frequent repetition under multiple authorship does not necessarily assure soundness of the principles.

I submit that *the only* "alternative . . . (to) . . . the widespread occurrence of an ancient malady called 'starvation' " is not increased food production, but that another equally viable alternative exists, which should be pursued concurrently.

The other alternative is to *use better* and more efficiently that which has been produced. This can be accomplished through improved postharvest procedures for our food supply between the farm and the ultimate consumer. Potential for accomplishment is great. Losses in the food chain account for, on the average, at least a 20% reduction over the amount produced that reaches the consumer. Some authors estimate cumulative postharvest losses of 35 to 50% for some agricultural sectors. The postharvest part of the food chain in this country accounts for 60% of the consumer's market basket dollar, uses four times as much energy as farm production, and employs five times the number of people as the farm production sector. Improved productivity in the postharvest system has recently lagged behind that of the production sector.

So the potential is great and the opportunity present for more food, and better quality food, to more people in the future through improvements in quality, storage, preservation, processing, handling, and transportation—all part of the postharvest system.

We are pleased to see a similar viewpoint espoused by the New York State Agricultural Experiment Stations in a recent publication—*New York's Food & Life Sciences Quarterly,* Vol. II, 4, 1978—stating: "Emphasis on food production alone is not enough to meet the demands of increasing population pressures, frequent droughts, crop failures, and famines that plague the world. Significant contributions to world food supplies can be made by better use of present foods by decreasing losses throughout the food pipeline. . . ."

Yes, agricultural production is vital and must be supported, as Zelitch stated. But research in other areas such as postharvest technology also offers fine opportunities for payoff.

L. A. Wolff

Director, Science & Education Administration, Agricultural Research, USDA, Philadelphia

**** Companies so marked appear in the foreign regional edition only.**

DIRECTORIES

Advertising Management for the American Chemical Society Publication

CENTCOM, LTD

Thomas N. J. Koerwer, President; James A. Byrne, Vice President; Clay S. Holden, Vice President; Benjamin W. Jones, Vice President; Robert L. Voepel, Vice President; 25 Sylvan Rd. South, Westport, Connecticut 06880 (Area Code 203) 226-7131.

ADVERTISING SALES MANAGER
Benjamin W. Jones

SALES REPRESENTATIVES

Atlanta, Ga . . . Robert E. Kelchner, CENTCOM, Ltd. Telephone: 203-226-7131

Boston, MA . . . Robert E. Kelchner, CENTCOM, Ltd. Telephone: 203-226-7131

Chicago, IL . . . Charles E. von Brecht, CENTCOM, Ltd., 540 Frontage Rd., Northfield, IL 60093. Telephone: 312-441-6383

Cleveland, OH . . . Daniel J. Cook, CENTCOM, Ltd., 17 Church St., Berea, OH. 44017. Telephone: 216-234-1333

Denver, CO . . . Clay Holden, CENTCOM, Ltd. Telephone: 213-325-1903

Houston, TX . . . Huckle Hawley, Inc. Two Corporate Square Building, Suite 350, 3930 Kirby Drive, Houston, TX 77098. Telephone: 713-522-3831

Los Angeles, CA . . . Clay Holden, CENTCOM Ltd. 3142 Pacific Coast Highway, Suite 200, Torrance, CA 90505. Telephone: 213-325-1903

New York, NY . . . Alfred L. Gregory, Robert Kelchner, CENTCOM, Ltd., 60 East 42nd St., New York, NY 10017. Telephone: 212-972-9660

Philadelphia, Pa . . . Benjamin Jones, Alfred L. Gregory, CENTCOM, Ltd., GSB Building, Suite 510, 1 Belmont Ave., Bala Cynwyd, Pa. 19004. Telephone: 215-667-9666

San Francisco, CA . . . Robert E. La Pointe, CENTCOM, Ltd., Suite 303 211 Sutter Street, San Francisco, CA. 94108. Telephone: 415-781-3430.

Westport, CT . . . Robert E. Kelchner, CENTCOM, Ltd., 25 Sylvan Rd. South, Westport, Ct. 06880. Telephone: 203-226-7131.

United Kingdom

Reading, England . . . Malcolm Thiele, Technomedia Ltd., Wood Cottage, Shurlock Row, Reading RG10 0QE. Telephone: 073-581-302

Manchester, England . . . Jill E. Loney, Technomedia Ltd., 216 Longhurst Lane, Mellor, Stockport SK6 5PW. Telephone: 061-427-5660

Continental Europe . . . Andre Jamar, Rue Mallar 1, 4800 Verviers, Belgium, Telephone: 087-22-53-85 Telex no. 49263

Tokyo, Japan . . . Haruo Morbayashi, International Media Representatives Ltd., 2-29, Toranomon 1-Chome, Minato-ku, Tokyo 105 Japan. Telephone: 502-0656

PRODUCTION DEPARTMENT
Production Director
Joseph P. Stenza
Production Assistants
Barbara Aufderheide
Diane C. McGrath
Classified Advertising
Doris Zimmerman